

FINALE | FIREWORKS®

User Manual for Timeline

Version 6

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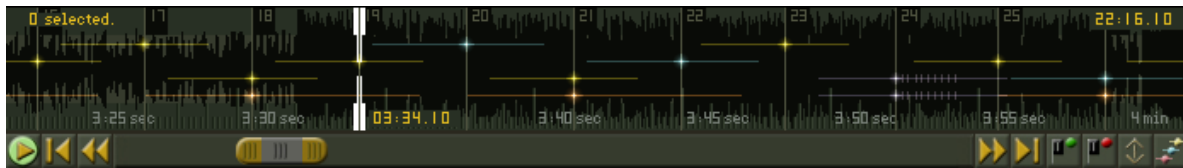
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1. Overview

The timeline is a graphical visualization of the effects and sound track over the entirety of the show, providing easy ways to select effects by clicking on them, shift clicking, or dragging a selection box over them. With items selected on the timeline, you can cut and paste, or drag to move them around in time. The timeline is the most powerful tool in the application for visualizing the entire show in one picture, and for making adjustments.

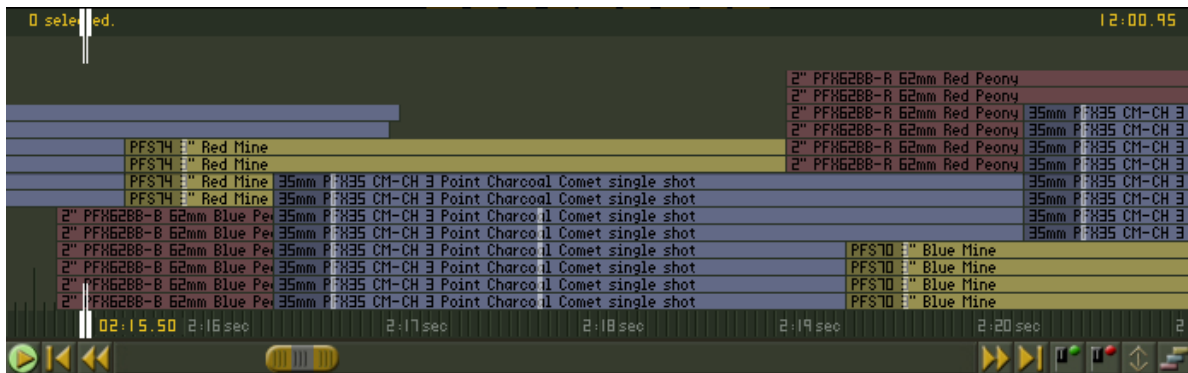
A typical view of the timeline looks like this,



If you compress the timeline to see the entire show, you see a color-coded intensity view of the full duration:



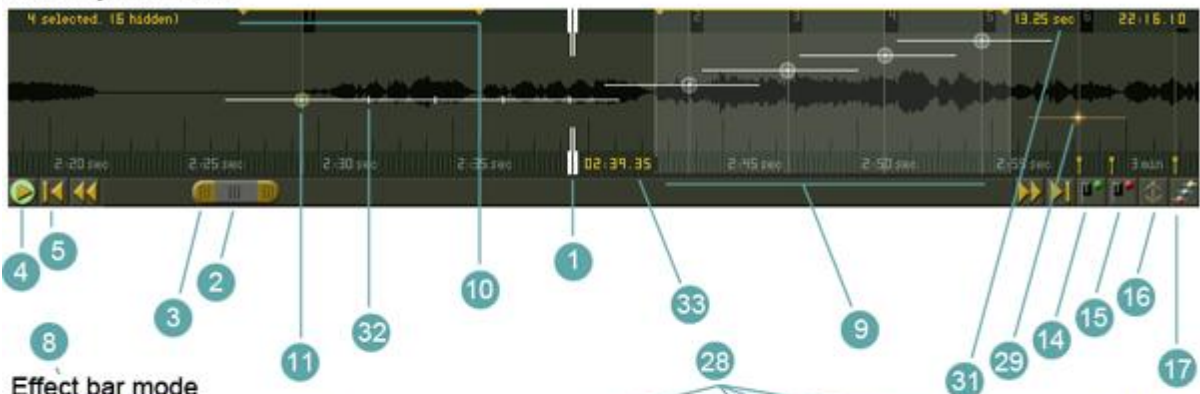
When reviewing or editing the show, you may choose to enlarge the height of the timeline and switch to effect bar mode to see the names of all the effects:



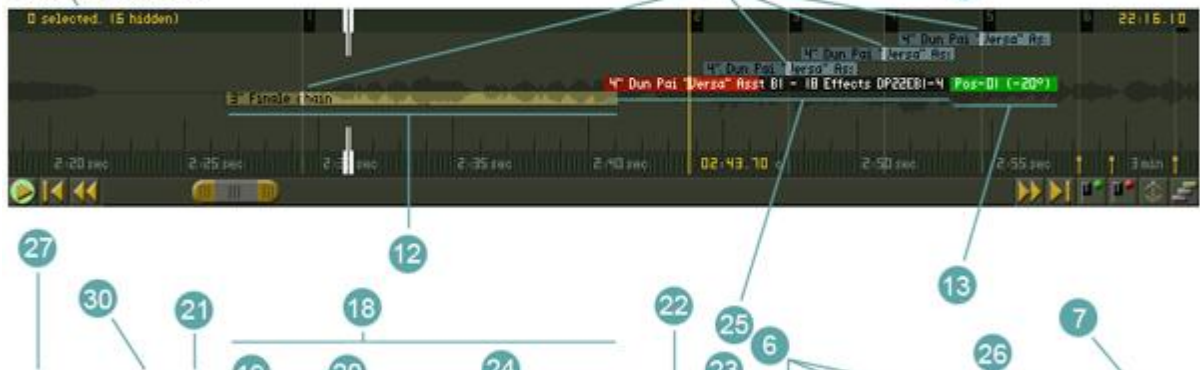
2. Legend

The timeline has a variety of modes and special features for advanced users. Since choreographers spend hours and hours making adjustments to shows, these advanced features can save you a lot of time. This section describes all the features of the timeline, from basic to advanced. The components of the timeline in its three modes are shown in the following diagram:

Intensity bar mode



Effect bar mode



Intensity blip mode



This table identifies the components, which are referred to by number in the later sections:

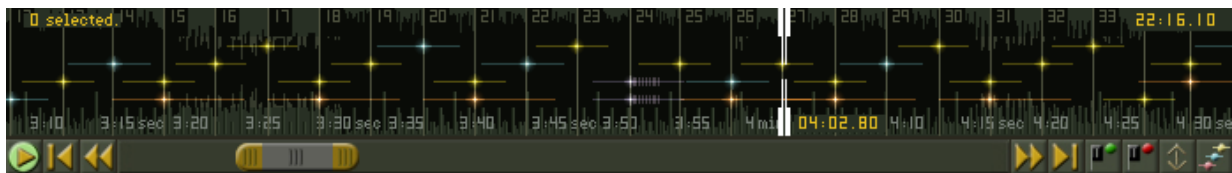
1.	Playhead	14.	Add time cue	27.	Sound track waveform
2.	Scrollbar	15.	Remove time cue	28.	Effect time mark on effect bar
3.	Stretchy-ends	16.	Resize timeline height	29.	Effect time blip on intensity bar
4.	Play/pause button	17.	Change timeline mode	30.	Simultaneous effect count

5.	Rewind and other controls	18.	Duration details	31.	Looping region duration
6.	Time cue	19.	Prefire	32.	Effect times of chain components (on intensity bar)
7.	Show duration	20.	Duration after prefire	33.	Playhead time
8.	Selected and hidden effect counts	21.	Ignition time		
9.	Selection box	22.	Full dissipation time		
10.	Looping region	23.	Highlighted effect bar		
11.	Selected effect	24.	Effect times of chain components (on highlighted effect bar)		
12.	Effect bar	25.	Product ID, caliber, and name		
13.	Position and angle	26.	Hidden effect pin		

3. Timeline Modes

The timeline has three visual presentation modes: Intensity bar mode, effect bar mode, and intensity blip mode. The three modes look different, but they all work the same way. In all three modes, the effects are color coded by caliber. You can cycle through the modes by clicking the "Change timeline mode" button (17).

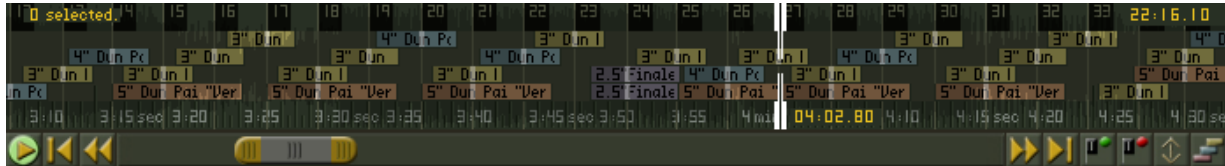
3.1. Intensity Bar Mode



The default mode, Intensity bar mode, shows a blip (29) at the effect time of the effect (the time that the shell breaks), and shows a line extending from the ignition time to the full dissipation time. The size of the blip is proportional to the caliber of the effect. If the effect is a chain, small hash marks on the intensity bar represent the effect times of the

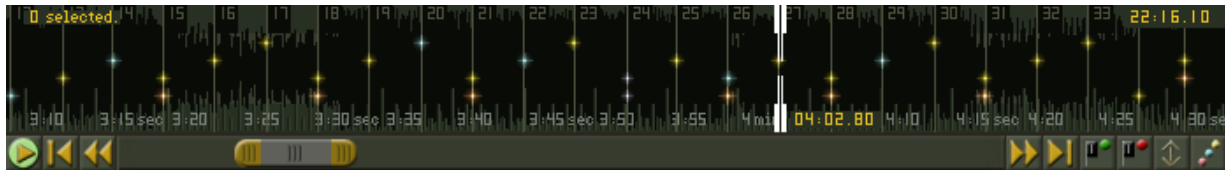
chain components (32). When the effect is selected (11), a circle is drawn around the blip. Unselected effects do not have circles.

3.2. Effect Bar Mode



The effect bar mode shows an effect bar (12) for each effect, with a little white vertical mark at the effect time (28). Since effect bars often overlap each other in complex sections of shows, the **effect time marks are always drawn in front, so they are always visible**. The effect time marks (and blips) have the highest priority for selecting items, so you can select an item **from behind** other items by clicking on its effect time mark.

3.3. Intensity Blip Mode



The intensity blip mode is the same as the intensity bar mode except without the bars. Since the blips themselves are relatively small, the intensity blip mode gives you the clearest view of the sound track waveform (27) underneath the effects.

4. Timeline Height

The "Resize timeline height" button (16) cycles through different height variations of the timeline. Obviously, the larger the timeline, the less screen space is available for the simulation in the Sky View, so you can choose the height appropriate for the show. Simple shows are usually displayed clearly even on the smallest setting with four slots for simultaneous effects. Large shows with multiple positions may be easier to grasp with the taller timeline. The illustrations at the top of this section show the timeline in several of its height settings.

5. Navigating in Time

By stretching the ends (3) of the scrollbar (2), you can zoom out to show the full duration of the show, or zoom into to show a small section of the show in fine detail. The standard VCR-like controls for play (4), rewind (5), etc., have their usual meanings for navigating in time. The white, vertical double lines are the playhead (1), representing the point in time that is displayed in the Sky View. When you insert an effect in the show, or paste a group of effects, they are inserted at the playhead's time. Grabbing and dragging the playhead is therefore a very common operation for editing, in addition to shuttling back and forth to view the show at different times. Because navigation is common, Finale includes numerous controls:

Space bar	Play / pause
Left arrow	Move playhead left
Right arrow	Move playhead right
Page up	Move playhead left by large amount
Page down	Move playhead right by large amount
Home	Move playhead to beginning
End	Move playhead to end
Click on time cue flag	Move playhead to time cue
Double-click on effect	Move playhead to effect time of the effect
Control-left arrow	Move playhead left to previous time cue (if any)
Control-right arrow	Move playhead right to next time cue (if any)
Drag playhead with mouse	Move playhead
Control-drag playhead with mouse	Fine tune playhead position

The last item in this list, **control dragging with mouse**, allows you to do fine tune adjustments to the time position. When holding control, dragging the playhead will always drag in the finest detail time increments, independent of the zoom level of the timeline.

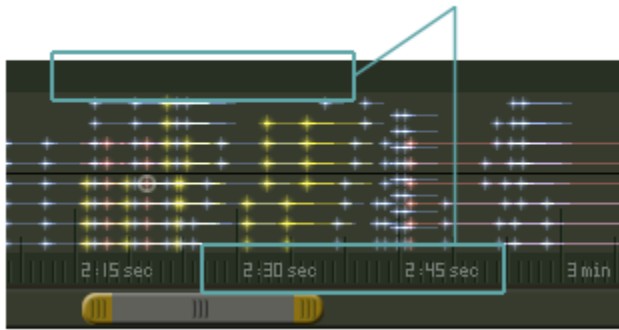
6. Selecting and Dragging Effects

Obviously you can select effects by clicking on them. Shift clicking adds effects to the selection set, so you can select multiple effects. If you click and drag on the background of the timeline, you can select effects by dragging a selection box (9) over them.

Click on effect	Select the effect
Shift-click on effect	Add effect to selection set (or remove it)
Click on background	Unselect all (and move playhead)
Click and drag on background	Create a selection box (9)
Control-A	Select all
Drag effect	Move selected effects in time
Control-drag effect	Fine tune position adjustment with duration details (18)
Control-roll over effect	Show duration details

The duration details (18) show the total duration of the selected effects, as discussed in further detail in the next section. When dragging an effect on the timeline, if the effect time aligns with other effects, the number of simultaneous effects is shown as +N to the left of the vertical line (30). You can use control drag and watch the simultaneous effect count to align effects exactly with other effects in the show.

Safe area to click without accidentally clicking on effects



The effect are only drawn in the center section of the timeline, and the time cue flags (6) are only drawn in the top section of the timeline -- so the bottom section of the timeline is always free for clicking and dragging to make a selection box, or clicking to unselect all and to position the playhead. In the bottom section you never have to worry about accidentally clicking on an effect or time cue flag.

7. Looping Region

When you drag a selection box (9) over the timeline and release, the operation leaves a looping region (10) identified by a horizontal yellow line at the top of the timeline. If you play the simulation starting from within the looping region, the playhead will loop back and repeat whenever it reaches the right edge of the region. The looping region provides a way for you to sit back and watch a section of the show over and over again without any user input required.



While you are dragging the selection box, the looping region shows the looping region duration (31). You can use this operation to measure the time of a section of the show. The total show duration is shown in the upper right (7).

8. Highlighted Effect Bar and Duration Details

When the cursor rolls over an effect in the timeline, the effect is shown as a highlighted effect bar (23), including the product ID, caliber, effect name, launch position, and angle. The product ID, caliber, and effect name are combined

and displayed in red (25); the launch position and angle are combined and displayed to the right, color coded depending on angle (13): blue for right leaning; green for left leaning; and yellow for straight up.



The duration details (18) show the total duration of the selected effects, broken down into the prefire time (19) before the first effect time, and the remaining duration to the right-most full dissipation time (20). The first ignition time (21) and the full dissipation time (22) are also indicated at the ends of the ruler.

The yellow vertical line represents the effect time of the effect. If the effect is a chain, the effect times of the components of the chain are also shown (24).

9. Time Cues

In Finale, time cues are markers on the timeline to which effects can be attached and moved together. Time cues are not directly related to firing system addresses and are not required to group multiple effects on the same firing system pin. Time cues only affect the times of the attached effects.

Effects attached to a time cue may be ignited together by a single firing system pin, or may be ignited by separate pins, depending on their ignition times and the firing system's "Max. e-matches per pin" setting. Thus, indirectly, time cues do relate to firing system addresses, but only insofar as they may align effects to the same ignition times.

The relationship between time cues and firing system pin addresses or voice cues for manual shows is discussed further below. For manual fired shows, the time cues often do correspond to the pin numbers or voice cues if the effects on each time cue ignite on the same pin and if the pin addresses count up from one.

Time cues are displayed on the timeline as flags extending the full height of the timeline (6). You can drag time cues left and right by clicking and dragging on the flag part at the top. The number on the flag is the number of the time

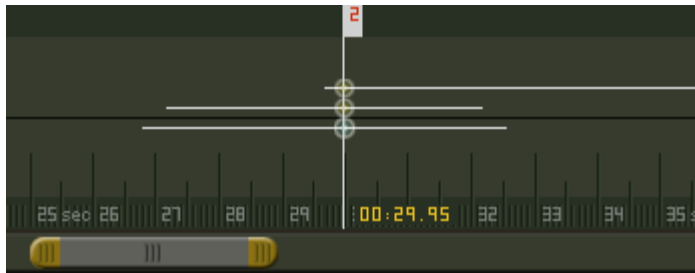
cue, in order starting from 1. When you insert a time cue or drag one on the timeline, the time cues re-order automatically.

Choreographers often lay down time cues for the whole show while listening to the sound track, and then come back and insert effects on the time cues to flesh out the show. You will notice the playhead snaps to the time cues as you pass over them. In tight areas you may need to control-drag the playhead to position it near but not exactly on a time cue. The controls used for adding and moving time cues are,

Space bar	Play/pause the sound track
Add time cue button (14)	Add a time cue
Remove time cue button (15)	Remove the time cue under the playhead
Roll over time cue	Show details on effect bars (effect bar view only)
Click on time cue flag	Move playhead to time cue
Click and drag time cue	Move time cue on timeline, and all attached effects
Control-M	Add time cue at playhead
Control-left arrow	Move playhead left to previous time cue (if any)
Control-right arrow	Move playhead right to next time cue (if any)

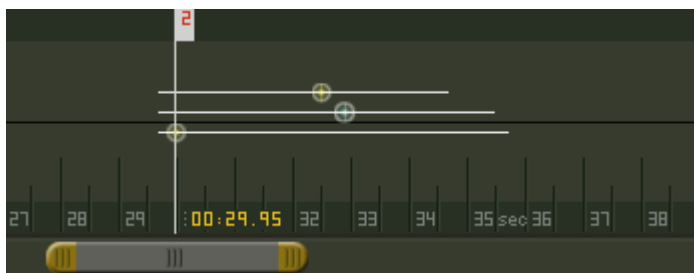
To lay down time cues while listening to the sound track, you can play or pause the music with the space bar, and then insert time cues by pressing control-M or clicking on the add time cue button (14). To remove a time cue, position the playhead over the time cue you want to remove and click the remove time cue button (15).

9.1. Example A: Aligned Effect Times for Pyromusicals



Time cues for computer fired pyromusicals are typically used as a design tool to align the effect times of one or more effects to the same point in time. If the effects have different prefire times, yet the same effect times, then their **ignition times will differ**. For computer fired shows, that's okay. Effects with different ignition times will require different firing system addresses, but that's the only way to get the desired result. This time cue mode is shown above in Example A.

9.2. Example B: Aligned Ignition Times for Manual Fired Shows



Time cues for manual fired shows are typically used to group multiple effects onto a single address of the firing system, so that all the grouped effects will be ignited by the same button or switch. Since the ignition times are therefore the same, if the effects have different prefire times then their **effect times will be different**. This time cue mode is shown above in Example B. In this mode, Finale automatically aligns the effects attached to a time cue such that the earliest effect time is coincident with the time cue.

Finale provides options to select the time cue mode in "Shows > Options":

Unaligned prefires on cue markers okay (for computer fire)

Ignition times may be different (see Example A, above)

10. Hidden Effects

You can hide effects by filtering them in the Firing View, or by hiding them explicitly with the "Edit > Hide selected" menu item. Hidden effects appear on the timeline as yellow or white pins at the bottom (26). White pins represent selected hidden effects; yellow pins represent unselected hidden effects. Although hidden effects can be in the selected state, they cannot *become selected* while they are hidden. The selection operations, including "Edit > Select all", do not apply to hidden effects. However, hidden effects that are selected can *become unselected* while they are hidden, as they will be if you click on the background of the timeline or Sky View. The reason hidden effects don't automatically become unselected when they are hidden is that you may want to filter in the Firing View without affecting the selection set.



Since it is sometimes easy to lose track of effects, the number that are hidden and/or selected is shown in the upper left of the timeline (8).

Hiding effects with "Edit > Hide selected" is a useful tool for working on a section of the show without the other effects getting in the way. One common pattern is selecting the range of effects you want to work on using the selection box, then inverting the selection set so that those effects are unselected and all the other effects are selected by choosing the menu item "Edit > Invert selected (select the unselected)", and then doing "Edit > Hide selected". If a few extraneous effects escape that procedure, then shift select them to select multiple, and do "Edit > Hide selected" to hide the stragglers. After that, work on your selected area of the show, and then when all done do "Edit > Unhide all".

Another common pattern is to shift-select certain launch positions that you want to work on, then do "Edit > Select all at launch position" to select all effects at those launch positions and then do "Edit > Invert selected (select the unselected)" to hide everything else. Clicking on a launch position automatically selects all the effects that are currently visible in the Sky View, but not the effects before or after that time frame, so the "Edit > Select all at launch position" command is required even though it may appear at first glance to be unnecessary.